JOURNAL OF ELECTROANALYTICAL CHEMISTRY AND INTERFACIAL ELECTROCHEMISTRY

Vol. 219 Nos. 1 and 2 March 10, 1987

CONTENTS

Chronopotentiometry with programmed current at an electrode expanding with any power law. Theoretical study of an ECE mechanism
J. Galvez, J. Zapata and A. Molina (Murcia, Spain) 1

Chronopotentiometry at a dropping mercury electrode. Effects of electrode sphericity on the potential–time curves and the transition times of an ECE mechanism
J. Galvez and J. Zapata (Murcia, Spain) 13

Diffusion-migration impedances for finite, one-dimensional transport in thin-layer and membrane cells. Part II. Mixed conduction cases: Os(III)/Os(II)ClO_4 polymer membranes including steady-state *I–V* responses
R.P. Buck (Chapel Hill, NC, U.S.A.) 23

Chemical and mechanical properties of redox polymer-modified electrodes. Part I. A mechanical/electrochemical model
E.F. Bowden, M.F. Dautartas and J.F. Evans (Minneapolis, MN, U.S.A.) 49

Chemical and mechanical properties of redox polymer-modified electrodes. Part II. Redox thermodynamics of plasma-polymerized vinylferrocene electrodes
M.F. Dautartas, E.F. Bowden and J.F. Evans (Minneapolis, MN, U.S.A.) 71

Chemical and mechanical properties of redox polymer-modified electrodes. Part III. Redox thermodynamics of linear polyvinylferrocene electrodes
E.F. Bowden, M.F. Dautartas and J.F. Evans (Minneapolis, MN, U.S.A.) 91

Electrochemical preparation of a ladder polymer containing phenazine rings
K. Chiba, T. Ohsaka, Y. Ohnuki and N. Oyama (Tokyo, Japan) 117

Electrochemical oxidation of the tris-1,10-phenanthroline iron(II) cation in the presence of sodium dodecylsulfate
D. Lemordant (Paris, France) 125

Electrochemical behavior of iron–1,10-phenantroline complexes at a carbon paste electrode
M.D. Luque de Castro, M. Valcarcel (Cordoba, Spain), F.N. Albahadily and H.A. Mottola (Stillwater, OK, U.S.A.) 139

Conversions of complex compounds and quinone on surface-modified electrodes
A.V. Gudavičius, V.J. Razumas and J.J Kulys (Vilnius, U.S.S.R.) 153

Behaviour of some poly (pyrrole–anthraquinone) films in DMSO electrolytes
P. Audebert, G. Bidan and M. Lapkowski (Grenoble, France) 165

Supramolecular phenomena in organic redox films at electrodes. Part II. The methylene blue/leucomethylene blue redox couple at the gold electrode
V. Žutić and V. Svetličić (Zagreb, Yugoslavia), J. Clavilier (Meudon, France) and J. Chevalet (Paris, France) 183

On the electroreduction mechanism of halobenzenes. Part I. A quantum chemical approach
J. Casado, I. Gallardo and M. Moreno (Barcelona, Spain) 197

Solvent and ion pairing effects on the reaction entropy for the electroreduction of aromatic molecules
J.S. Jaworski (Warsaw, Poland) 209

Mechanism and kinetics of the stepwise voltammetric reduction of pertechnetate in alkaline solution to Tc(VI), Tc(V) and Tc(IV)
A. Founta, D.A. Aikens and H.M. Clark (Troy, NY, U.S.A.) 221

Electrogenerated $R_4N(Hg)_5$ films: stoichiometry and substituent effects
C.M. Ryan, V. Svetličić and E. Kariv-Miller (Minneapolis, MN, U.S.A.) 247

An electroanalytical investigation on the nickel-promoted electrochemical conversion of CO_2 to CO
S. Daniele, and P. Ugo (Venice, Italy), G. Bontempelli (Udine, Italy) and M. Fiorani (Padova, Italy) 259

(continued on p. 3 of cover)

Contents (*continued*)

The cathodic decomposition of propylene carbonate in lithium batteries
M. Arakawa and J.-I. Yamaki (Ibaraki, Japan) 273

Square-wave voltammetry of berberine
Š. Komorsky-Lovrić (Jülich, F.R.G.) 281

SERS investigation of interfacial Pb(II) species in weakly acidic aqueous halide media
J. Coria-Garcia, J.E. Pemberton and R.L. Sobocinski (Tucson, AZ, U.S.A.) 291

Short communication

An in situ study of the mechanism of the electrochemical dissolution of copper in oxygenated sulphuric acid. An application of the quartz microbalance
R. Schumacher, A. Müller and W. Stöckel (Kiel, F.R.G.) 311

Preliminary notes

Studies of protein–electrode interactions by organosilyl derivatisation of pyrolytic graphite electrodes
F.A. Armstrong and K.J. Brown (Oxford, Great Britain) 319

Hydrogenative/cathodic stripping of iodine chemisorbed on smooth polycrystalline platinum electrodes
T. Mebrahtu, J.F. Rodriguez, B.G. Bravo and M.P. Soriaga (College Station, TX, U.S.A.) 327

Spectroelectrochemical study of polyaniline: the construction of a pH–potential phase diagram
R.J. Cushman, P.M. McManus and S.C. Yang (Kingston, RI, U.S.A.) 335

Extraordinary temperature effect on the hydrogen electrode potential in concentrated perfluoroalkanesulfonic acids
R.T. Atanasoski (Belgrade, Yugoslavia), W.E. O'Grady and C.E. Shea (Upton, NY, U.S.A.) 347

Heterogeneous one-electron exchange of silicotungstic heteropolyanion in dimethylformamide
B. Keita and L. Nadjo (Nancy, France) 355

Organized self-assembling monolayers on electrodes. Part I. Octadecyl derivatives on gold
E. Sabatani, I. Rubinstein, R. Maoz and J. Sagiv (Rehovot, Israel) 365

Book reviews 373

Author index 375

Subject index 376

Errata 379

JOURNAL OF ELECTROANALYTICAL CHEMISTRY AND INTERFACIAL ELECTROCHEMISTRY and BIOELECTROCHEMISTRY AND BIOENERGETICS

Publication schedule for the 1987 subscription (Please note that Vols. 213–215 appeared in 1986)

Month	N (1986)	D (1986)	J	F	M	A	
J. Electroanal. Chem.	213/1 213/2	214/ 1+2 215/ 1+2	216/ 1+2 217/1	217/2 218/ 1+2	219/ 1+2 220/1	220/2	The publication schedule for further issues will be published later.
Bioelectrochem. Bioenerg.							